CHAPTER 7

Digitalization: A Holistic Tourism Development Strategy for Domestic Tourism in India

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INTRODUCTION

How has the stress of domestic visitors in India been affected within the previous 2 years by digitization? And how do pilgrimage visitors in the rural parts of India have an influence on mental health? In the tourist business from a wide viewpoint, digitalisation playsan important role. Digitization is the process through which analogue data is digitally processed.All enterprises or all industries, independent of nature, need data that is an important production factor; digital data can be provided to tourism stakeholders in digital form. Tourism is essentially a product related to the service; a tourism product is defined as a construction physical and psychology that turns tragedies into reality. India's government emphasised business and economic digitisation(Raj &Aithal, 2018). Transparency, efficiency and increasing production are key aims of digitization in all respects.

During the demonization period, less cash transactions were carried out in India with attractive incentives for stakeholders; digital payments were charged on the wave of service charges and other services such as Aadhaar enrolment, passport application and tax returnsare the examples to help stakeholders.

Tourism is a mixture of all tourism stakeholders' activities, namely, tourists, service providers, governments, including local, state, central and other related tourism stakeholders. It has a major impact on society, including foreign exchange income and its associated repercussions such as GDP, GNP, and so on. According to the Ministry of Tourism, domesticand foreign tourism in India

accounted respectively for 2.3 billion domestic tourists and 17.91 million in 2019. The statistical data show that tourist revenues cannot be disregarded since tourism is linked to invisible exports and related economic advantages in the country.

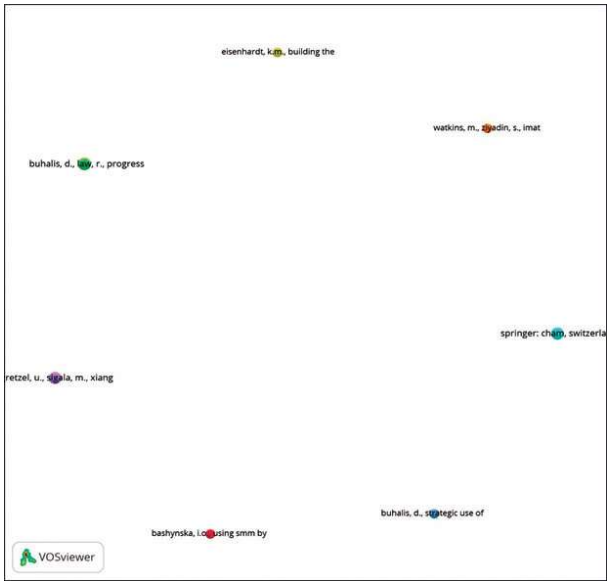
The questions stated in beginning related to the stress, anxiety, and mental health related to tourism for basically rural tourists who like to travel to within India for digitalization process as they are in lay man words are not educated to handle digitalization process. But since 2014 to onwards, the tourists (rural tourists who intend to visit different destination within India as FIT or GIT) are facing serious problem in current scenario. Hotel booking, transportation, and others useful services are paid through digital mode for speedy and smooth operation in the tourism industry- which is reality in the present situation. Experts opined that virtual tourism is the future of the tourism industry and digitalization is one of the vital competitive weapon for tourism stake holders.

The present paper describes on'Digitalization: A Holistic Tourism development strategy for Domestic tourism in India' aims to enlighten the difficulties faced by rural pilgrimage domestic tourists due to digitalization in course of their travel. How to overcome the situationwhich are raised in present time and simultaneously how does it benefit to the tourists.

REVIEW LITERATURE

The researchers performed bibliometric analysis via VOSviewer to identify the relevant and authentic publications.,(*VOSviewer - Visualizing Scientific Landscapes*, n.d.).The most appropriate paper for Scopus is shown in Fig-1. The minimal quote-3 was the parameter. The seven papers fulfil the seven-cluster criteria. There's a connection between them.

Fig-2 indicates the key words with linking, tourism management, conceptual framework, tourism development, tourist destination is interlinking among them and tourism development keywords are highly significant among them. This analysis helps to understand the keywords most suited to the study.


eisenhardt, k., building the
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retzel, u., ala, m., xiang
buhalis, d., strategic use of
bashynska, i., using smm by
VOSviewer

Fig 1 Bibliometric analysis- Co-citation and Cited references- through VoSviewer

Information and communication technology is a strong and significant instrument to the tourist sector. The use of ICTs in the tourist sector is largely explored for the beneficial impact of ICTs(Jharkharia, 2005). The economic consequences of tourism have been carefully analysed in (Hojeghan&Esfangareh, 2011) via the digitisation process. The study concludes that numerous tourist procedures, such ticket reservations (airlines, trains, buses, taxis), hotel reservations or cancellations, etc., lead mainly to a favourable and cognitive picture of the tourism sector.(*Social Media and ECRM as a Prerequisite for Hotel Success*, n.d.)Milovic found that digitization has a beneficial influence on the connection between energy consumers. The marketing of services, i.e. tourism and hospitality via web sites, socialmedia, and other powerful electronic campaigns, is extremely meaningful. (Aramendia- Muneta&Ollo López, 2013) indicated that both productivity and competitiveness relate tdCT justification in travel businesses.

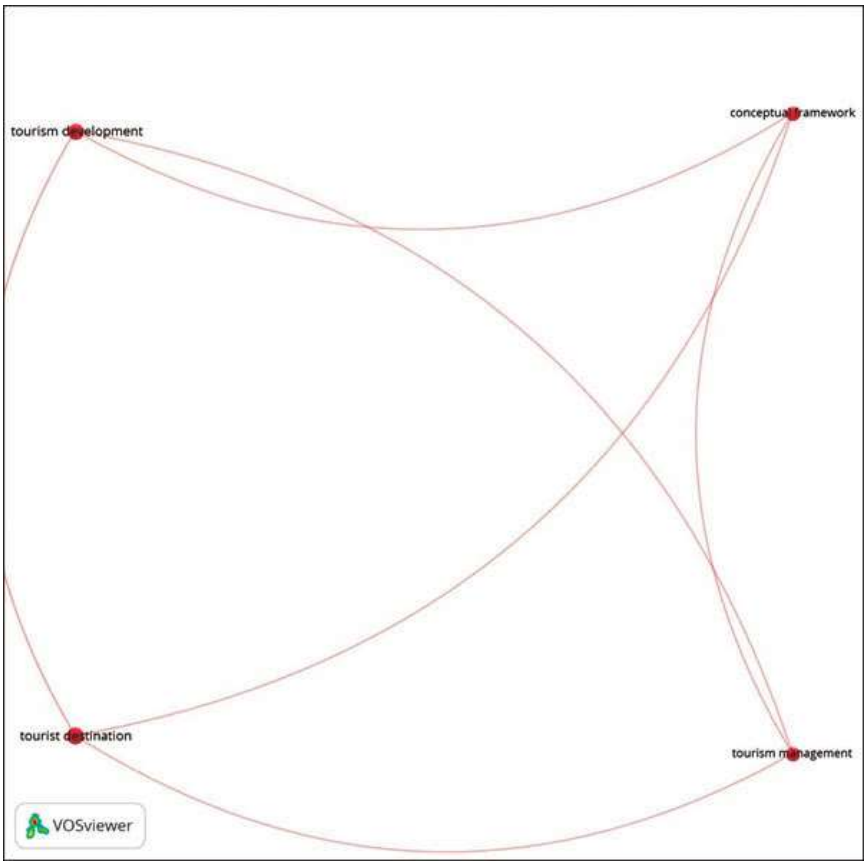

FIG 2 Key- words – Bibliometric Analysis Through VOSviewer

Communication and its respective advantages and problems in the tourist sector playan essential role(Dr. Egger, 2013). It also highlighted the efficiency of marketing tactics in the tourist sector in pulling and pushing the dispersed technology.(*(PDF) Tourism Goes Mobile: A Study on Young and Literate Mobile Users' Adoption of Smartphone Enabled Tourism Product Booking Services*, n.d.),2014 by Chang and Jang are studying the use of mobile phones, even smartphones, for young people and literature groups to book (2014). The study showed that smartphone reservations have a major influence on price levels, relative advantages and complexity. The present uses and adoptions of information and communication technology in Zimbabwe have been studied by(*(PDF)*

TOWARDS A STRATEGY FOR ICT INTEGRATION IN THE TOURISM SECTOR IN ZIMBABWE, n.d.).The study highlighted some of the obstacles to technology development in the tourist sector, including the lack of government policies, ICT laws, intermittent network supply and organisational commitment. The report recommended a plan for the dissemination of technology in the tourist sector at national level.

Bilghan and Nejad (2015)(*Special Issue: Innovation in Hospitality and Tourism.*, n.d.) mentioned that service sector has played an important role in the development of various industrialized economy. The study identified the trends such as the concept of sharing economy, which has been emerging in the hospitality sector, courtesy to the innovation through the digitalization. The study also points out that now consumers themselves havebeen more demanding for digitalization.(Jaremen, 2016) discussed the usage of ICT in hospitality industry, particularly in hotel industry. The study suggested that ICT is applied in hotels to improve the service quality.

Capital needs in the hotel sector have also been shown to be a key obstacle to the ICT implementation.(Maráková&Medveďová, 2016), The studies indicated that a decline in the number of visitors, duration and sales in European tourism sector prompted market actors to innovate both in terms of their products and in terms of customers' accommodations. The study indicates that further research is needed in the field of tourism and hospitality innovation. In addition, the policy should focus on medium-sized and small businesses in the tourist industry.

The function of ICT and its influence on the tourist sector in particular have been investigatedby(*Analyzing the Importance of ICT in Tourism Industry with Reference to Thailand | Semantic Scholar*, n.d.). The research examined how ICT influences the hospitality industry and managers' views on how ICT is involved in the tourist and hospitality industries.(Alexis, 2017) studied the influence of digitisation and automation on the tourist sector using a case study approach. The study indicated that stakeholders must accept it instead of fighting digitalization. This would improve consumer satisfaction and offer up opportunities for future research.(*Digital India and Its Impact on Travel Trends | MakeMyTrip Blog*, n.d.) Dhingra examined the influence on the tourist sector of the digital revolution through programmes likethe Digital India and outlined its advantages to the business. Digitalisation has altered the way you travel by giving advantages such as simpler payment services, more educatedtravelling options, and new trends. (*Digital Amnesia and the Future Tourist | Emerald Insight*,n.d.); Greenwood and Quinn studied the impact and impact on future visitors of digital forgetfulness.

The study has shown that digitization influences the visitors' decision making, the way they are communicated with marketing messages and the way they can memorise tourism. The empirical research carried out in Germany by(Härting et al., 2017) has examined possible advantages of digitization for tourist sector. The survey also examined how much more the tourist sector has to do in terms of digitization.

In the study, the major drivers of numeration were identified in the tourist sector using structural equation modelling approaches. The influence of the digital

endowment and development of telecommunication infrastructures on domestic tourism demand in Italy has been explored by(Matteo et al., 2018) The study showed a beneficial influence on domestic tourist inflows via digital resources. Higher levels of literacy and consumer revenues also affect the domestic tourist sector positively. The impacts of mobile phones and the internet ontourist influx in Africa have been investigated by(Adeola & Evans, 2019).The study demonstrated a two-way causation between internet usage, squared internet and tourism; a one-way causality of mobile penetration and tourism as well as the two-way causation of squared mobile penetration.

RESEARCH GAP

The "gap spotting" method has been adopted to find out research gaps. No one has studied the effects of digitalization on rural pilgrimage tourism. The study helps to find out the causes of the ineffectiveness of rural pilgrimage tourists due to digitalization.

RESEARCH OBJECTIVES

1. To find out the factors of tourism in relation to digitalization,
2. To find out the satisfaction and dissatisfaction factors of digitalization in the context oftourism,

METHODOLOGY OF RESEARCH

The research areas are two districts (East Midnapore and West Midnapore) in West Bengal and two districts in Odisha.

Population size-Sixty (60) respondents have been chosen through a random sampling process.

Research Approach: A hybrid research approach has been used in this study. A qualitative research approach has been used for subjective understanding of the study, whereas a quantitative research approach has been used for quantification purposes.

Method. A purposive sampling method has been used.

Sample Unit-Rural domestic pilgrimage tourists are the sample units of the study as they are the respondents of the survey. They are the primary source of data.

Secondary Sources: Journal papers published in Scopus are secondary sources of data, as Scopus papers are authentic sources.

Data Collection Tools-Scheduling has been used to collect data through online mode teleconferences and video conferences with recording facilities. The scheduled languages were Bengali, Oriya, and Hindi. The responses were translated into English for data analysis purposes.

Data analysis-SPSS software has been used to analyse the data. Mean, SD, and percentage are used as descriptive statistic tools for summarising data.Cross tabulation has been used for referential purpose.

RESULT AND DISCUSSION

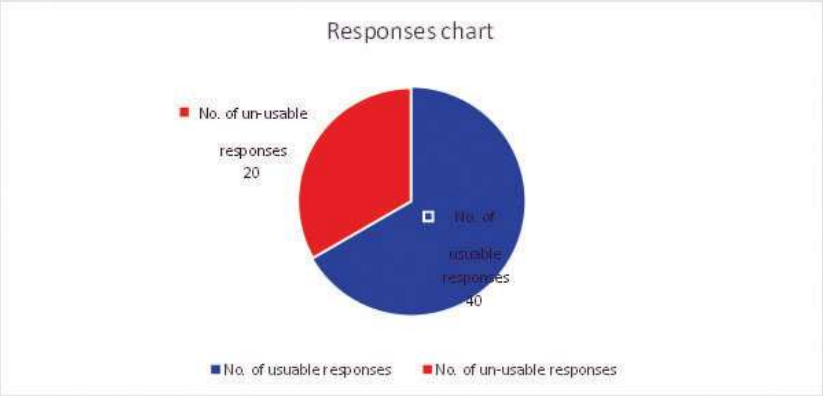
Responses chart
No. of un-usable responses 20
No. of usuable responses 40
No. of usuable responses
No. of un-usable responses

Fig. 3 Responses Chart

Sixty-seven (67%) responses have been received. The responses were received through tele conferences. The recorded responses were analysed and found that most of the responses answer the survey question with satisfactory way.

Table No. 1 Demographic Profile

Demographic Parameter	Frequency	Percentage
Tourists' age		
18-30	11	27.5
31-43	11	27.5
44-55	07	17.5
above 56 Total	11	27.5
	40	100.00
Tourists' Gender		
Male Female Total	25	62.5
	15	37.5
	40	100.0
Tourists' Education		
10th	17	42.5
10 +2	8	20.0
Graduates	11	27.5
Post Graduate and above	4	10.0
Total	40	100.0
Tourists' Income		
10,000- 15,000	16	40.0
15,001- 20,000	14	35.0

20,000- 25,000	9	22.5
above 25,001	1	2.5
Total	40	100.0

Table No.- 1 indicates about demographic profile of the domestic tourists in India who are basically living in the rural part of the India. Male tourists visit to the destination rather than female tourists and 10th Passed tourists percentage is 42.5% and highest income group is Rs. 10,000/ to 15,000/.

Table No.2 Descriptive Statistic (MEAN, SD)

	N	Mean	SD
Tourists' age	40	2.45	1.176
Tourists' Income	40	1.87	.853
Tourists' Education	40	2.05	1.061

Table No. 3 Tourists' age and classical Booking

Tourists' age Group	Classical Booking					
	Very difficult	Difficult	Cannot say	Good	Very good	Total
18-30	5	4	1	1	0	11
	45.5%	36.3%	9.1%	9.1%	.0%	100.0%
31-43	4	4	1	1	1	11
	36.3%	36.4%	9.1%	9.1%	9.1%	100.0%
44-55	2	2	2	0	1	7
	28.6%	28.6%	28.6%	.0%	14.2%	100.0%
above 56	4	5	1	0	1	11
	36.4%	45.4%	9.1%	.0%	9.1%	100.0%
Total	15	15	5	2	3	40
	37.5%	37.5%	12.5%	5.0%	7.5%	100%

Table No. 3 indicates about the classical booking and various tourists' age group. Every age group got highest percentage of very difficult or difficult in context classical booking.

Table No. 4 Tourists' Gender and Classical Booking

Tourists' Gender	Classical Booking					Total
	Very difficult	Difficult	Cannot say	Good	Very good	Total

Male	9	9	5	2	0	25
	36.0%	36.0%	20.0%	8.0%	.0%	100.0%
Female	6	6	0	0	3	15
	40.0%	40.0%	.0%	.0%	20.0%	100.0%
Total	15	15	5	2	3	40
	37.5%	37.5%	12.5%	5.0%	7.5%	100.0%

Table No. 4 reveals that both male and female are getting problem for classical booking but female is getting more problem than male.

Table No. 5 Tourists' Education and Classical Booking

Tourists' Education	Classical Booking					Total
	Very difficult	Difficult	Cannot say	Good	Very good	Total
10th	5	7	1	1	3	17
	29.4%	41.2%	5.9%	5.9%	17.6%	100.0%
10+2	2	3	2	1	0	8
	25.0%	37.5%	25.0%	12.5%	.0%	100.0%
Graduate	6	4	1	0	0	11
	54.5%	36.4%	9.1%	.0%	.0%	100.0%
Post Graduate & above	2	1	1	0	0	4
	50.0%	25.0%	25.0%	.0%	.0%	100.0%
Total	15	15	5	2	3	40
	37.5%	37.5%	12.5%	5.0%	7.5%	100.0%

Table No. 5 reveals that higher educated people are getting more problem rather thanless qualified people in context of classical booking.

Table No. 6 Income and classical Booking

Tourists' Income	Classical Booking					Total
	Very difficult	Difficult	Cannot say	Good	Very good	Total
10,00--15,000	4	6	4	2	0	16
	25.0%	37.5%	25.0%	12.5%	.0%	100.0%
15,001-20,000	7	6	1	0	0	14
	50.0%	42.9%	7.1%	.0%	.0%	100.0%

20,001 - 25,000	4	3	0	0	2	9
	44.4%	33.3%	.0%	.0%	22.2%	100.0%
above	0	0	0	0	1	1
25,001						
	.0%	.0%	.0%	.0%	100.0%	100.0%
Total	15	15	5	2	3	40
	37.5%	37.5%	12.5%	5.0%	7.5%	100.0%

Table No. 6 reveals that higher income groups are getting more problem than lowerincome groups in context of classical booking.

Table No. 7 Age and sharing economy

Tourists' Age	Sharing Economy					Total
	Very difficult	Difficult	Cannot say	Good	Very good	Total
18-30	3	2	4	1	1	11
	27.3%	18.2%	36.4%	9.1%	9.1%	100.0%
31-43	2	3	4	1	1	11
	18.2%	27.3%	36.4%	9.1%	9.1%	100.0%
44-55	0	4	0	2	1	7
	.0%	57.1%	.0%	28.6%	14.3%	100.0%
above 56	2	4	2	1	2	11
	18.2%	36.4%	18.2%	9.1%	18.2%	100.0%
Total	7	13	10	5	5	40
	17.5%	32.5%	25.0%	12.5%	12.5%	100.0%

Table No.7 reveals age-wise sharing economy.

Table No. 8 Gender and sharing economy

Tourists' Gender	Sharing Economy					Total
	Very difficult	Difficult	Cannot say	Good	Very good	Total
Male	4	10	8	2	1	25
	16.0%	40.0%	32.0%	8.0%	4.0%	100.0%
Female	3	3	2	3	4	15
	20.0%	20.0%	13.3%	20.0%	26.7%	100.0%
Total	7	13	10	5	5	40
	17.5%	32.5%	25.0%	12.5%	12.5%	100.0%

Table No. 9 Age and Social Media Affection

Tourists' age	Social Media					Total
	Very difficult	Difficult	Cannot say	Good	Very good	Total
18-30	3	4	1	2	1	11
	27.3%	36.4%	9.1%	18.2%	9.1%	100.0%
31-43	3	4	1	2	1	11
	27.3%	36.4%	9.1%	18.2%	9.1%	100.0%
44-55	1	3	1	1	1	7
	14.3%	42.9%	14.3%	14.3%	14.3%	100.0%
above 56	5	2	1	1	2	11
	45.5%	18.2%	9.1%	9.1%	18.2%	100.0%
Total	12	13	4	6	5	40
	30.0%	32.5%	10.0%	15.0%	12.5%	100.0%

Table No. 10 Gender and Social Media

Tourists' Gender	Social Media					Total
	Very difficult	Difficult	Cannot say	Good	Very good	Total
Male	4	9	4	6	2	25
	16.0%	36.0%	16.0%	24.0%	8.0%	100.0%
Female	8	4	0	0	3	15
	53.3%	26.7%	.0%	.0%	20.0%	100.0%
Total	12	13	4	6	5	40
	30.0%	32.5%	10.0%	15.0%	12.5%	100.0%

Table No. 11 Tourists' Age and Digitalization

Tourists Age	Digitalization				
	Very difficult	Difficult	Cannot say	Good	Total
18-30	3	3	4	1	11
	27.3%	27.3%	36.4%	9.1%	100.0%
31-43	4	2	4	1	11
	36.4%	18.2%	36.4%	9.1%	100.0%
44-55	3	1	2	1	7
	42.9%	14.3%	28.6%	14.3%	100.0%
above 56	4	4	2	1	11
	36.4%	36.4%	18.2%	9.1%	100.0%

Total	14	10	12	4	40
	35.0%	25.0%	30.0%	10.0%	100.0%

Table No. 12 Tourists' Gender and digitalization

Tourists' Gender	Digitalization				
	Very difficult	Difficult	Cannot say	Good	Total
Male	11	4	9	1	25
	44.0%	16.0%	36.0%	4.0%	100.0%
Female	3	6	3	3	15
	20.0%	40.0%	20.0%	20.0%	100.0%
Total	14	10	12	4	40
	35.0%	25.0%	30.0%	10.0%	100.0%

Table No. 13 Tourists' Age and User Virtual Reality

Tourists' Age	User Virtual Reality					
	Very difficult	Difficult	Cannot say	Good	Very good	Total
18-30	4	4	2	1	0	11
	36.4%	36.4%	18.2%	9.1%	.0%	100.0%
31-43	4	3	1	1	2	11
	36.4%	27.3%	9.1%	9.1%	18.2%	100.0%
44-55	3	2	2	0	0	7
	42.9%	28.6%	28.6%	.0%	.0%	100.0%
above 56	3	5	1	1	1	11
	27.3%	45.5%	9.1%	9.1%	9.1%	100.0%
Total	14	14	6	3	3	40
	35.0%	35.0%	15.0%	7.5%	7.5%	100.0%

Table No. 14 Tourists' Gender and user Virtual reality

Tourists' Gender	User virtual reality					
	Very difficult	Difficult	Cannot say	Good	Very good	Total
Male	8	8	4	3	2	25
	32.0%	32.0%	16.0%	12.0%	8.0%	100.0%
Female	6	6	2	0	1	15
	40.0%	40.0%	13.3%	.0%	6.7%	100.0%
Total	14	14	6	3	3	40
	35.0%	35.0%	15.0%	7.5%	7.5%	100.0%

CONCLUSION

Classical booking, sharing economy, media affection, and user virtual reality are tourism factors in relation to digitalization. Limitation of the study is that how digitalization affects GDP and GNP has not been studied.

The satisfaction level is measured by how much difficulty tourists are facing in travelling due to digitalization. Classical booking is one of the most important factors by which the difficulties can be measured. The study reveals that the results are age-wise, gender-wise, income-wise, and education-wise. Each and every time, it reveals that rural domestic tourists are facing problems. It is recommended to do an empirical study to find out why and how they are facing the problem.

References

1. Adeola, O., & Evans, O. (2019). Digital tourism: Mobile phones, internet and tourism in Africa. *Tourism Recreation Research*, *44*(2), 190–202. https://doi.org/10.1080/02508281.2018.1562662
2. Alexis, P. (2017). R-Tourism: Introducing the Potential Impact of Robotics and ServiceAutomation in Tourism. *Ovidius University Annals, Economic Sciences Series*, *XVII*(1), 211–216.
3. *Analyzing the Importance of ICT in Tourism Industry with Reference to Thailand | Semantic Scholar*. (n.d.). Retrieved October 10, 2021, from https://www.semanticscholar.org/paper/Analyzing-the-Importance-of-ICT-in- Tourism-Industry-Rajamohamed/caa52c469d2338f881ad2d18a702ea2ca013bed7
4. Aramendia-Muneta, M. E., & Ollo López, A. (2013). ICT impact on tourism industry.
5. *International Journal of Management Cases*, *15*, 84–98.
6. *Digital amnesia and the future tourist | Emerald Insight*. (n.d.). Retrieved October 10, 2021, from https://www.emerald.com/insight/content/doi/10.1108/JTF-11-2016- 0037/full/html
7. *Digital India and its Impact on Travel Trends | MakeMyTrip Blog*. (n.d.). Retrieved October 10, 2021, from https://www.makemytrip.com/tripideas/blog/digital-india-impact-on-travel-trends
8. Dr. Egger, R. (2013). The impact of near field communication on tourism. *Journal of Hospitality and Tourism Technology*, *4*. https://doi.org/10.1108/JHTT-04-2012-0014
9. Härting, R.-C., Reichstein, C., Härtle, N., & Stiefl, J. (2017). Potentials of Digitization in the Tourism Industry — Empirical Results from German Experts. *BIS*. https://doi.org/10.1007/978-3-319-59336-4_12
10. Hojeghan, S. B., & Esfangareh, A. N. (2011). Digital economy and tourism impacts, influences and challenges. *Procedia - Social and Behavioral Sciences*, *19*, 308–316. https://doi.org/10.1016/j.sbspro.2011.05.136
11. Jaremen, D. E. (2016). Advantages from ICTS usage in hotel industry. *Czech Journal ofSocial Sciences, Business and Economics*, *5*, 6–17. https://doi.org/10.24984/cjssbe.2016.5.3.1
12. Jharkharia, S. (2005). IT-enablement of supply chains: Understanding the barriers. *J. Enterprise Inf. Management*, *18*, 11–27. https://doi.org/10.1108/17410390510571466

13. Maráková, V., & Medveďová, M. (2016). Innovation in Tourism Destinations. *ForumScientiae Oeconomia*, *4*(nr 1 Contemporary Innovations and Management Challenges), 33–43.
14. Matteo, D. D., Evangelista, V., & Ferrari, F. (2018). *TOURISM AND DIGITAL ENDOWMENT IN ITALY: A SPATIAL ANALYSIS*. 23.
15. *(PDF) Tourism goes mobile: A study on young and literate mobile users' adoption of smartphone enabled tourism product booking services*. (n.d.). Retrieved October 10, 2021, from https://www.researchgate.net/publication/286617784_Tourism_goes_mobile_A_study _on_young_and_literate_mobile_users'_adoption_of_smartphone_enabled_tourism_p roduct_booking_services
16. (PDF) TOWARDS A STRATEGY FOR ICT INTEGRATION IN THE TOURISM SECTOR IN
17. *ZIMBABWE*. (n.d.). Retrieved October 10, 2021, from https://www.researchgate.net/publication/312021514_TOWARDS_A_STRATEGY_ FOR_ICT_INTEGRATION_IN_THE_TOURISM_SECTOR_IN_ZIMBABWE
18. Raj, K., & Aithal, S. (2018). *Digitization of India – Impact on the BOP Sector*. *3*.https://doi.org/10.5281/zenodo.1211434
19. *Social Media and eCRM as a Prerequisite for Hotel Success*. (n.d.). Retrieved October 9, 2021, from https://journaldatabase.info/articles/social_media_ecrm_as_prerequisite_for.html
20. *Special Issue: Innovation in hospitality and tourism.* (n.d.). Retrieved October 10, 2021, fromhttps://www.cabdirect.org/cabdirect/abstract/20153366399
21. *VOSviewer – Visualizing scientific landscapes*. (n.d.). VOSviewer. Retrieved November 1,2020, from https://www.vosviewer.com//